Group Art Unit: 1633

## In the claims:

Please cancel claims 2-31 without prejudice.

Please add claims 32-51 as follows::

- 32. (New) A transgenic mouse comprising in its genome a first exogenous nucleic acid molecule that functionally disrupts a NFATp gene of said mouse and a second exogenous nucleic acid molecule that functionally disrupts a NFAT4 gene of said mouse.
- 33. (New) The transgenic mouse of claim 32, wherein the phenotype of said mouse is characterized by lymphadenopathy relative to a wild-type mouse
- 34. (New) The transgenic mouse of claim 32, wherein the phenotype of said mouse is characterized by splenomegaly relative to a wild-type mouse.
- 35. (New) The transgenic mouse of claim 32, wherein the phenotype of said mouse is characterized by blepharatis relative to a wild-type mouse.
- 36. (New) The transgenic mouse of claim 32, wherein the phenotype of said mouse is characterized by interstitial pneumonitis relative to a wild-type mouse.
- 37. (New) The transgenic mouse of claim 32, wherein said mouse displays an increase in peripheral T cells relative to a wild-type mouse.
- 38. (New) The transgenine mouse of claim 37, wherein said peripheral T cells have a memory/activated phenotype relative to a wild-type mouse.
- 39. (New) The transgenic mouse of claim 32, wherein said mouse displays compromised FasL expression relative to a wild-type mouse.
- 40. (New) The transgenic mouse of claim 39, wherein said mouse displays defective apoptosis relative to a wild-type mouse.
- 41. (New) The transgenic mouse of claim 32, wherein said mouse displays increased Th2 cytokine production relative to a wild-type mouse.

BEST AVAILABLE COPY

Continuation of U.S. Application No.: 09/181,716



- 42. (New) The transgenic mouse of claim 41, wherein said Th2 cytokine is IL-4.
- 43. (New) The transgenic mouse of claim 42, wherein said mouse displays increased expression of IL-4 dependent immunoglobulin isotypes.
- 44. (New) The transgenic mouse of claim 43, wherein said immunoglobulin isotypes are IgG1 and IgE.
- 45. (New) A method for identifying a test compound that regulates Th2 cell activity comprising:
  - a) providing:
  - i) first and second transgenic mice comprising a genome deficient in NFATp and NFAT4; and
    - ii) a composition comprising said test compound; and
  - b) administering said test compound to said first transgenic mouse; and
  - c) evaluating Th2 cell activity in said first transgenic mouse relative to Th2 cell activity in said second transgenic mouse to thereby identify a compound that regulates Th2 cell activity.
- 46. (New) The method of claim 45, wherein said test compound is at least one peptidic compound derived from the calcineurin-interacting region of NFATp or NFAT4.
- 47. (New) The method of claim 45, wherein said test compound comprises the amino acid sequence of SEQ ID NO: 1.
- 48. (New) The method of claim 45, wherein said peptidic compound comprises the amino acid sequence of SEQ ID NO: 2 or SEQ ID NO: 3.
- 49. (New) A method for producing a transgenic mouse, wherein said mouse exhibits a phenotype characterized by increased Th2 cytokine production relative to a corresponding wild-type mouse, comprising:
- a) providing (1) an embryonic stem cell comprising wild-type NFATp and NFAT4 genes; (2) a pseudopregnant mouse; and (3) an exogenous nucleic acid molecules comprising at least a portion of NFATp and a NFAT4 gene, said portion comprising one or more deletions in one or more exons of said NFATp and NFAT4 genes;
- b) introducing said nucleic acid molecules into said embryonic stem cell under conditions such that said nucleic acid molecule functionally disrupts at least one of said wild-type NFATp